Barnhill Memorial Middle School

**Grade 7 Science Syllabus (2012-2013)**

**Teachers:**

* Mary Jo Murphy (French Immersion)
* Teresa Vaughan (French Immersion)
* Dan O’Neill (English)
* Chris Edgecombe (English)

**Topics Covered:**

Life Science – Interactions with Ecosystems: Ecosystems such as forests, croplands, rivers, lakes, estuaries, and oceans are inhabited by different organisms that are well adapted to their environment. Each ecosystem is biologically and physically unique, yet all ecosystems function as a systems model. Energy from the sun is fixed by plants and then transferred to a variety of consumers and decomposers. The ecosystems themselves are not independent of one another as energy, biotic and abiotic factors can move from one ecosystem to another to involve even larger relationships.

Earth and Space Science – Earth’s Crust: Knowledge of the Earth is rapidly growing as new methods and technologies are developed to study the components and dynamics of the Earth’s crust. As students develop an understanding of the dynamics of geological systems and events, they are better able to explain and make connections between the theories of Earth science and their own experiences with local geology.

Physical Science – Heat: Heat is a form of energy that is part of students’ lives and that of their communities. Students should have an opportunity to explore the properties of heat and how they are related to the measurement of temperature. The particle theory and the kinetic molecular theory help students explain their observations and understand both the relationship between heat and temperature and the concept of heat capacity on a qualitative level.

Physical Science – Mixtures & Solutions - Working with and discussing mixtures and solutions allows students to make use of their emerging understanding of the particulate nature of matter. Students will increasingly see that many mixtures and solutions are extremely useful and directly related to their lives.

**Materials needed:**

* 2 yellow duo-tangs and 2 yellow Hilroy notebooks
* Inquiring mind

**Evaluation:**

* Tests/Quizzes
* Daily Work/Assignments/Projects
* Science Literacy/Journals
* Scientific Methodology (labs)/Glossary

**\*\*\* Subject to Change \*\*\***